

**Type K81**

DN 25 - 150  
PN 63 - 400

## Multistage Control Valve

Butt-Welded

### Data Sheet

Edition: EN 9 / 2015

© MPOWER Engineering, a.s.  
Pod vinicí 2028/20, Modřany, 143 00 Praha 4, CZ  
T: +420 225 371 300, F: +420 225 371 325  
E: info@mpowergroup.eu, W: www.mpowergroup.eu

together we are strong  
[www.mpowergroup.eu](http://www.mpowergroup.eu)

**Content**

**Application** .....3  
**Technical description** .....3  
**Testing** .....3  
**Operation**.....3  
**Connection**.....3  
**Installation**.....3  
**Dimensions** .....3  
    Valves with manual control .....3  
    Valves with electric servomotor .....4  
**Materials of main parts** .....4

**Copyright**

All rights reserved. No content provided herein may be copied, distributed or otherwise reproduced without previous written approval of the company MPOWER Engineering, a.s.

© MPOWER Engineering, a.s., Praha 2015

**Contact**

**MPOWER Engineering, a.s.**  
Pod vinicí 2028 / 20  
143 01 Praha 4 – Modřany, CZ

T: +420 225 371 300  
F: + 420 225 371 325  
E: [info@mpowergroup.eu](mailto:info@mpowergroup.eu)  
W: [www.mpowergroup.eu](http://www.mpowergroup.eu)



**Application**

- Regulating valves reducing pressure drop for fluids (i.e. the pressure difference at the inlet and outlet side) in the range of 5.1 to 20 MPa, for vapor and gas expansion ratio (i.e. the ratio of the outlet pressure to the inlet pressure) in the range of 0.7 to 0.2
- **Industry**  
Power engineering, chemical facilities
- **Environment**  
Normal, tropical, explosive, seismic

**Technical description**

- Angle valve
- Forged body
- Gland valve

**Testing**

- The valves are tested with water for strength, impermeability, operational capacity and tightness depending on the operating parameters and body material according to EN 12266-1
- Minimum pressure for the strength test is 1.5 x PN

**Operation**

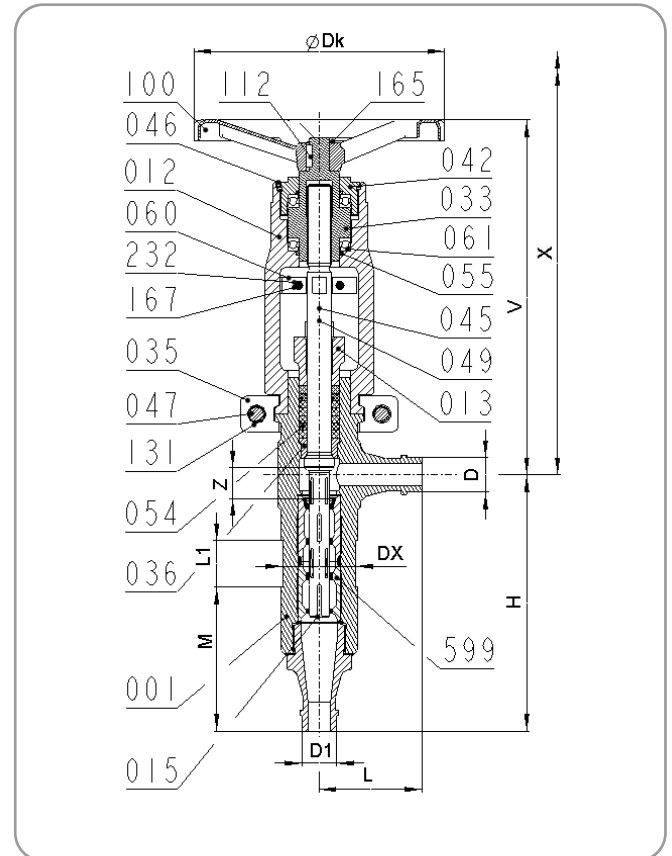
- Manual
- Electric servomotor

**Connection**

- Butt-welded ends or flanged according to CSN, EN, DIN, ANSI, GOST or on demand

**Installation**

- In any position with the direction of flow under the plug, the the shut-off valves also above the plug
- Valves with electric or pneumatic actuators - see manufacturer's installation instructions



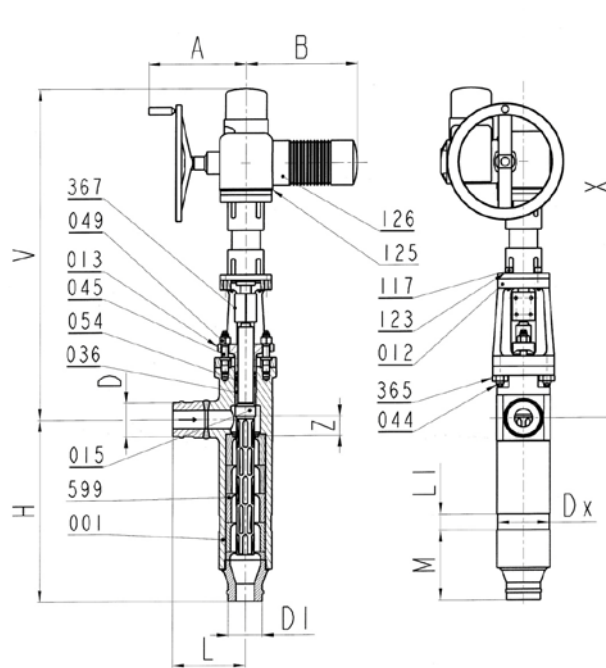
**Dimensions**

**Valves with manual control**

DN	PN (CLASS)	Dk	D	D1	DX	H	L	L1	M	V	X	Z	m kg
40/80	63-400 (400-2500)	250	49	89	105	350	120	45	150	905	1200	44	105
65/125		250	77	140	150	500	200	55	210	945	1250	64	155
80/80		400	89	89	175	483	250	55	238	955	1250	73	245
100/100		500	116	116	175	623	250	55	235	955	1250	68	210

**Valves with electric servomotor**

DN	PN (CLASS)	A	B	D	D1	DX	H	L	L1	M	V	X	Z	m kg
40/80	63-400 (400-2500)	282	254	49	89	105	350	120	45	150	800	1100	44	90
65/125		282	254	77	140	150	500	200	55	210	800	1100	64	140
80/80		384	336	89	89	175	483	250	55	238	901	1200	73	260
100/100		384	336	116	116	175	623	250	55	235	901	1200	68	260
150/150		408	325	172	172	230	815	300	60	260	1050	1400	82	360


**Materials of main parts**

Pos.	Name	Material
001	<b>Body</b>	Carbon, non alloyed steel: 11416, P250GH(C22.8) Low alloyed steel: 15128, 14MoV6-3, 13CrMo4-5, 16Mo3, 10CrMo910 High alloyed steel: 15NiCuMoNb5-6-4, X10CrMoVNB9-1 Austenitic steel: X6CrNiTi18-10, 08X18H10T
599	<b>Insert</b>	X6CrNiTi18-10, 08X18H10T
	<b>Surfacing</b>	Type Stellite 6 (type C1111)
015	<b>Stem</b>	17029.4, 17027.4
012	<b>Yoke</b>	15128, 11CrMo9-10
013	<b>Gland lid</b>	15128, 42 2744, GS-17CrMo5-5
036	<b>Bushing</b>	08X18H10T, X6CrNiTi18-10, 17 247
044	<b>Bolt</b>	15320, 40CrMoV4-7
045	<b>Screw</b>	15 320, 40CrMoV4-7
049	<b>Nut</b>	15 236, 42CrMo4, 34Cr4
054	<b>Sealing ring</b>	Expanded graphite – density 1,7 g/cm <sup>3</sup>
367	<b>Coupling</b>	15128, 11CrMo9-10
365	<b>Nut</b>	15320, 40CrMoV4-7
125	<b>Isolating ring</b>	TEMAPLUS
117	<b>Screw</b>	CSN EN ISO4762
123	<b>Washer</b>	DIN 7980
126	<b>El. servomotor</b>	Auma